AMENDMENTS TO THE SPECIFICATION

Please amend page 1 by inserting the following paragraph below the Title of the Invention at line 3:

This application is a divisional of USSN 09/518,737, filed on March 3, 2000, now U.S. Patent 6,709,833, granted on March 23, 2004.

Kindly amend the two paragraphs appearing at page 7, lines 3-11 as follows:

Figures 7A - 7L ~~is~~ are photographs showing the results of immunostaining of PI-3,4-P2 induced by the H_2O_2 treatment. The upper six photographs (Figures 7A - 7F) represent the case with no addition of wartmannine, and the lower six photographs (Figures 7G - 7L) the case with addition of wartmannine.

Figures 8A - 8H ~~is~~ are photographs showing the specificities of 8C2 determined by the competitive reaction with PI-3,4,-P2 analogs. Figures 8A and 8B represents the case with no competitive compound, Figures 8C and 8D the case with 50 μM phosphatidylcholine, Figures 8E and 8F the case with 50 μM PI-3,4,-P2, and G and H the case with 50 μM PI-4,5,-P2.

At page 10, kindly amend line 4 as follows:

PI-4,5-P2 phosphatidylinositol-4,5-bisphosphate

At page 26, kindly amend lines 16- 22 as follows:

As a result, staining for PI-3,4-P2 was observed three and ten minutes after the H_2O_2 treatment when wortmannin was not added prior to the induction of PI-3,4-P2 production by H_2O_2 treatment, and the staining intensity increased with time. In contrast,

no staining of the cells was observed after the H_2O_2 treatment when wortmannin was added, confirming that the antibody of the present invention is reactive with PI-3,4-P2. (Figs. 7A – 7L).

At page 26, kindly amend lines 23-31 as follows:

To examine the specificity of 8C2, phosphatidylcholine (PC), PI-3,4-P2, or PI-4,5-P2 was added to the culture medium of 293 cells and their effects on the immunoreaction were determined. As a result, PC and PI-4,5-P2 did not compete with PI-3,4-P2, and fluorescence produced by PI-3,4-P2 staining in the cells was observed. In contrast, fluorescence was not observed in the cells to which PI-3,4-P2 was added because the antibody was reacted with PI-3,4-P2 added (Figs. 8A - 8H). These results confirmed that the antibody of the present invention is specific to PI-3,4-P2.